

ABSTRACT

A semiconductor device having a voltage-current conversion function, a digital-analog conversion function, and a gamma correction function is provided. A digital input signal (voltage) is input from an input terminal of a switching circuit. The switching circuit selects a
5 current source to be connected to the input terminal according to the value of the digital input signal. Each current source outputs a predetermined value of current according to the signal from the input terminal. In this manner, by switching a current source for outputting current according to a digital input signal, gamma correction can be performed as well as digital-analog conversion.